

Product Specification



- ◆ Hydrocarbon fuel detection
- ◆ Disposable Products
- ◆ Accurate locating
- ◆ High reliability
- ◆ Waterproof

Product Overview

XW3000 Locating fuel Sensing cable can detect hydrocarbon fuel liquids anywhere on the cable. It can be connected with XW non-locating leak detector to form a leak detection system with high detection sensitivity, rapid and reliable response. The internal structure of the sense cable is similar to that of the water, acid and base liquid leak sense cable, but its surface is wrapped by a layer of conductive polymer protective cover, and the outermost layer is also a layer of fluoropolymer textile layer. Suitable for all kinds of places where there is risk of leakage of hydrocarbon fuel liquid, which is of great significance to energy saving and environmental protection.

Application & Features

Application

- Oil pipeline
- Jet fuel pipeline
- Diesel generator room
- Oil storage pipeline
- Oil storage tank
- Oil pump

Features

- Flexible for installation in complex and bending pipelines
- The sense cable reacts quickly with the hydrocarbon fuel liquid, and the alarm can be

triggered in a short time.

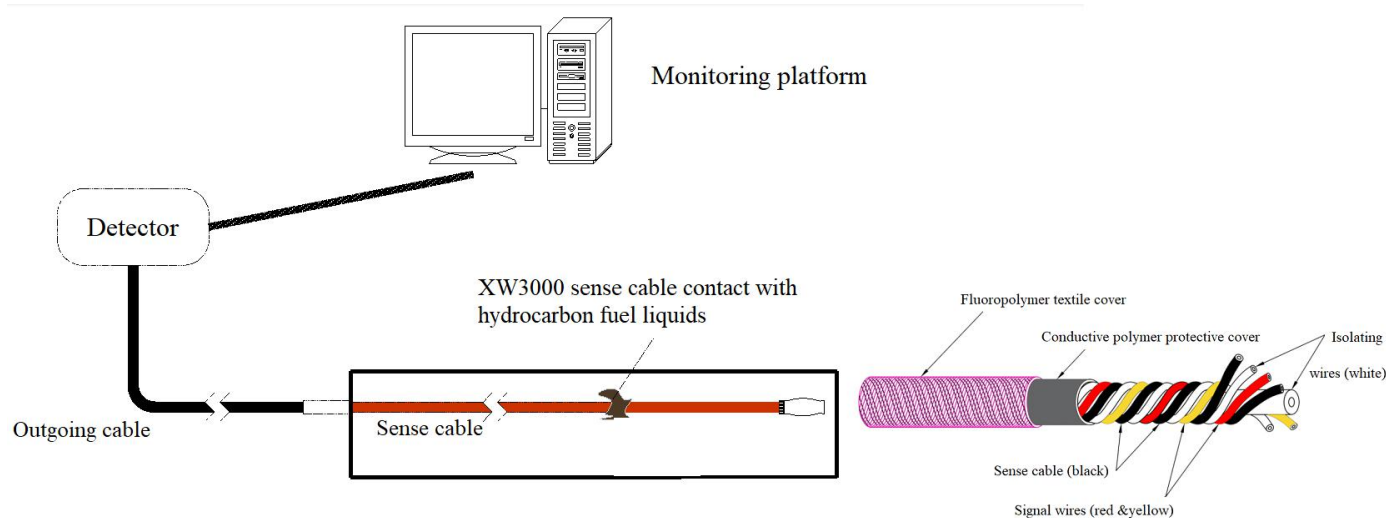
- The sense cable does not react with water, which completely solves the problem of false alarms caused by touching water.
- As a one-time product, sense cable is irreversible after reacting with the hydrocarbon fuel liquid and needs to be replaced in time.
- The resistance is uniform and the error is within 1%. With high stability and accuracy of detection and locating for the leakage detection system which takes resistance as an important parameter.
- Waterproof structure of the plastic plug, convenient cascade and expand detection range. Variety of length meet the needs of detection ranges.

Technical Data

Cable diameter	7.0mm
Sense cable	2*30AWG with conductive fluoropolymer protective cover
Continuity detection wire and signal wire	2*26AWG with conductive fluoropolymer insulation
Material(Central axis)	Fluoropolymer
Cable weight	500g/15m±10 g/15m
Wire core quantity	4pcs
Cable resistance	13Ω/m
Abrasion performance	> 65 cycles
Tensile	≤90kg
Operating temperature	-20℃~85℃
Alarm leakage (tap water)	Any position along the leakage sense cable: maximum 30mm
Operating temperature	Room temperature 20℃: gasoline (15 minutes), #1 diesel (1 hour), #2 diesel (2 hours), xylene (30 minutes)

Operation Principle

When the sensing cable is in contact with the liquid hydrocarbon fuel, it penetrates into the conductive rubber layer through the outer textile protective cover, causing it to shrink. The core wires that were originally spirally arranged in parallel are all short-circuited due to shrinking and clinging to the conductive rubber layer, so that the current changes. According to the proportional relationship between the resistance and the length of the conductor, alarm signal is issued through the rapid calculation of the detector, figuring out the specific leak location.



Schematic diagram of operation principle

Installation

- ◆ Each XW3000 sense cable needs outgoing cable for easy to connecting with the detector quickly and reliably.



Outgoing cable



Jumper cable



Terminal end

- ◆ Special installation adhesive tape is used to fix cables on the flat surface to ensure accurate and reliable cable detection.
- ◆ Installation accessories (terminal end and jumper cables, etc.) can connect multiple sense cable together to form a complete detection circuit.

Notices

- ◆ The area where the sense cable is laid should avoid electrostatic interference.
- ◆ Sense cables should be kept dry and clean during laying.
- ◆ Avoid contact with metal objects during laying sense cables.
- ◆ Sense cables should not be soaked in dirty water or other chemicals for a long time.
- ◆ As disposable product, please replace in time after leakage alarm.
- ◆ Sense cables should be installed close to the ground to maximize contact with leaking fluids.
- ◆ Do not overlap or touch the sense cables in the laying area, otherwise false alarm may be caused.
- ◆ Sense cable should not be laid in the environment of high temperature, high humidity, vibration, corrosive gas and other electronic interference sources.
- ◆ During installation or use of sense cables, do not manually extrude and pressure, otherwise the sense cables may be damaged.
- ◆ Sense cable installation should avoid too much tension, the cable and plug connection may get looseness, poor connection and fracture.
- ◆ Pay attention to the pin sequence of male and female connectors when connecting the sense cable, align the holes and gently insert them, and then tighten the threaded ring clockwise (unlock in a counterclockwise direction).

Certificates



We recommend that you use this manual under the guidance of professional personnel. If the product is damaged by violation operation or a third party force majeure such as fire, flood, lightning and natural disaster, Xiangwei will not assume any responsibility.

Shenzhen Xiangwei Measurement and Control Technology Co., LTD

Web: www.xiangweileak.com

Tel +86 0755-83541693

xw@szxiangwei.net